

March 29, 2004

County of Sonoma
Department of Transportation and Public Works
2300 County Center Drive, Suite B-100
Santa Rosa, CA 95403

Attention: David D. Knight, Director

ALAMEDA COUNTY

Roberta Cooper
Scott Haggerty
(Chairperson)
Nate Miley
Shelia Young

Application Numbers: 4970, 6532

Plant Number: A2254

Equipment Location:

Sonoma County Central Landfill
500 Meham Road
Petaluma, CA 94952

**CONTRA COSTA
COUNTY**

Mark DeSaulnier
Mark Ross
Gayle Uilkema
(Secretary)

Dear Mr. Knight:

The requirement for public and EPA review of the proposed Major Facility Review Permit has been completed. No comments from EPA or the public were received. The District has decided to issue the permit.

MARIN COUNTY

Harold C. Brown, Jr.

Following is the District's response to the request for changes to the permit submitted by Alex Sebastian on behalf of Sonoma County.

NAPA COUNTY

Brad Wagenknecht

**SAN FRANCISCO
COUNTY**

Willie Brown, Jr.
Chris Daly
Jake McGoldrick

Response to Comments:

A summary of each of the comments is listed below, followed by a discussion of the comment, the District's position, and any changes that will be made to the permit as a result of the comment.

SAN MATEO COUNTY

Jerry Hill
Marland Townsend
(Vice-Chairperson)

Comment #1: The mailing address and contact information on the Title Page of the proposed permit is outdated and needs to be corrected.

SANTA CLARA COUNTY

Liz Kniss
Patrick Kwok
Julia Miller
Dena Mossar

- Discussion:
Sonoma requests that the Mailing Address be changed from 575 Administration Drive, Room 117A, Santa Rosa California 95403 to 2300 County Center Drive, Suite B-100, Santa Rosa, California 95403.

SOLANO COUNTY

John F. Silva

SONOMA COUNTY

Tim Smith
Pamela Torliatt

Sonoma also requests that the Responsible Official be changed from Mr. Edward J. Walker to Mr. David D. Knight, Director, Department of Transportation and Public Works; Telephone Number (707) 565-3584. In addition, Alex Sebastian, the facility contact, has a new phone number: (707) 565-7940.

Jack P. Broadbent
**EXECUTIVE
OFFICER/APCO**

- District's Position:
The District is not opposed to this request.
- Changes to the Permit as a Result of Comment #1:
The Title Page of the Title V permit has been corrected as requested.

Comment #2: The Maximum Design Capacity of the Landfill S-1 given in Table II-A of the proposed permit should be annotated as follows: “Maximum Design Capacity = 32.65 E6 yd³ (24.96 E6 m³) and 19.59 E6 tons excluding final cover materials”.

- Discussion:
Sonoma has requested that the maximum design capacity of the landfill as listed in Table II-A correspond to that listed in Permit Condition #4044, Part 1. The permit condition includes the annotation “excluding final cover material” in the landfill capacity limit, while Table II-A does not.
- District’s Position:
The District intends to exclude final cover materials from the stated capacity of the landfill, so we are in agreement that Table II-A be annotated as requested.
- Changes to the Permit as a Result of Comment #2:
The annotation “(excluding final cover materials)” has been added to Table II A for S-1 Landfill, following “Max. Design Capacity = ...”

Comment #3: The maximum daily waste acceptance rate for the Landfill S-1 given in Tables II A and VII-A should include the annotation “except for temporary situations approved by the Local Enforcement Agency (LEA)”. In addition, Permit Condition #4044, Part 1 should be similarly annotated.

- Discussion:
The daily waste acceptance limit for the Sonoma County Central Landfill is set by the Local Enforcement Agency (LEA). The LEA is also authorized to change the daily limit on a temporary basis in the event of a declared emergency. Since the Title V permit does not currently allow this flexibility it could seriously limit the landfill’s ability to meet the needs of the community in an emergency situation.
- District’s Position:
Since a temporary change to the daily waste acceptance rate (that does not affect the annual acceptance rate) will not change the annual emissions from the facility or trigger any new District regulations, the District is not opposed to this request.
- Changes to the Permit as a Result of Comment #3:
The annotation “(except for temporary situations approved by the LEA)” has been added to Tables II-A and VII-A for S-1 Landfill, following “Max. Acceptance Rate = 2,500 tons/day”. In addition, Permit Condition #4044, Part 1 has been modified as follows:

1. Except for temporary emergency situations approved by the Local Enforcement Agency, the The total amount of municipal solid waste received at the Sonoma County Central Landfill (S-1) shall not exceed 2,500 tons per day nor 897,500 tons per year. The total cumulative amount of all wastes and cover materials (excluding final cover material) placed in the landfill shall not exceed both 32.65 million cubic yards and 19.59 million tons. (basis: Cumulative Increase and 2-1-301)

Comment #4: The number of landfill gas collection wells and collectors listed in the Title V permit is not accurate. The correct number of approved wells is 112 vertical gas wells and 56 horizontal collectors installed with 8 additional horizontal collectors pending.

- Discussion:
Table II-A and Permit Condition #4044, Part 4 currently list the number of permitted wells at the landfill as 94 vertical wells and 50 horizontal collectors. However, after recent well construction activities performed under Authorities to Construct #2227 and #7834, the actual numbers are 112 vertical wells and 56 horizontal collectors. Sonoma requests that this correction be made to the Title V permit. In addition, the number of proposed horizontal collectors listed in Permit Condition #4044, Part 4 should be changed from 14 to 8 because 6 of these collectors have been installed.
- District's Position:
The number of gas collection wells associated with a landfill is part of the description of that source and must be accurately maintained in the Title V permit. Therefore, the District is in agreement with Sonoma that the well totals listed in the permit should be corrected to the current numbers.
- Changes to the Permit as a Result of Comment #4:
Table II-A and Permit Condition #4044, Part 4 were corrected as requested by Sonoma to reflect 112 vertical wells and 56 horizontal wells currently installed, with 8 additional horizontal wells included in an existing Authority to Construct.

Comment #5: Since the applicable monitoring requirement for the landfill gas fired IC Engines/Generator Sets was changed from Regulation 8-34-507 to 8-34-509, the recordkeeping requirement should also have been changed from 8-34-501.3 to 8-34-501.11.

- Discussion:
Regulation 8-34-507 requires the operator of a flare or other enclosed combustor to continuously monitor and record the temperature in the combustion zone of the device, while Regulation 8-34-509 requires that emission control systems other than a flare or other enclosed combustor be monitored for key emission control system operating parameters on a

schedule approved by the APCO. Therefore, one or the other of these requirements will apply to any landfill gas emission control device.

In the proposed revision to the Title V permit, the District changed the applicable requirement for the landfill gas fired IC engines from Regulation 8-34-507 to Regulation 8-34-509, but did not change the corresponding recordkeeping requirements. Sonoma has requested that Regulation 8-34-501.3 be replaced with Regulation 8-34-501.11 in Table IV-B to correctly reflect the applicable recordkeeping requirement for Regulation 8-34-509.

- District's Position:
The District is in agreement with Sonoma. The District replaced Regulation 8-34-507 with 8-34-509 in the proposed Significant Revision of the Title V permit because it more appropriately applies to IC engines. However, the corresponding recordkeeping requirement was not changed. This was an oversight and should be corrected.
- Changes to the Permit as a Result of Comment #5:
Regulation 8-34-501.3 has been replaced with Regulation 8-34-501.11 in Table IV-B.

Comment #6: Sonoma requests that the timeline for delivering source test results to the District after the test date be extended to 60 days.

- Discussion:
The District currently requires that source test results be submitted within 45 days from the test date for the Flare A-2, the IC Engines S-4, S-5, S-6, S-7, S-9, S-10, S-11, S-12, S-13 and S-14, and the landfill gas characterization test. Sonoma has requested to have the test reports due 60 days after the respective test dates to allow ample time for laboratory samples to be analyzed and reports prepared.
- District's Position:
The District is not opposed to this request.
- Changes to the Permit as a Result of Comment #6:
The time for submitting source test reports has been extended to 60 days from the date of the test in Permit Condition #4044, Parts 14 and 15, and Permit Condition #19933, Part 8.

Comment #7: Sonoma requests that the District remove acetone, carbon monoxide, and mercury from the list of compounds to be tested for in the annual landfill gas characterization.

- Discussion:
Condition #4044, Part 15 requires that the landfill gas produced by the facility be analyzed on an annual basis for all of the compounds listed in the most recent version of EPA's AP-42 Table 2.4-1. Sonoma has requested that three compounds included in that list; acetone, carbon monoxide, and mercury, be excluded from annual testing, acetone and carbon monoxide because they are not listed as toxic air contaminants by the District and mercury because of the sampling complexity and cost.

- District's Position:
The District agrees that acetone and carbon monoxide should be excluded from the annual gas characterization because they are not listed as toxic air contaminants and therefore have no impact on the cancer risk or hazard index determinations for the site. Mercury is listed as a toxic air contaminant, but is not believed to have a significant impact on the overall toxic risk associated with the landfill. For example: the maximum landfill gas generation rate at the Central Landfill is estimated to be 4,533 scfm at its peak in 2013. Assuming the AP-42 Table 2.4-1 default concentration for mercury (i.e. 2.92 E-04 ppmv), the highest unabated mercury emissions will be 0.36 lb/yr. Since this is significantly below the District's risk screen trigger level for mercury (58 lb/yr), it is assumed that mercury does not have a significant risk impact and may therefore be excluded from annual testing
- Changes to the Permit as a Result of Comment #7:
Permit Condition #4044, Part 15 was modified as follows in response to Sonoma's request:
 - *15. In order to demonstrate compliance with Part 6 above, the Permit Holder shall conduct a characterization of the landfill gas at least once per year. The landfill gas sample shall be drawn from the main landfill gas header. The landfill gas shall be analyzed for methane (CH₄), carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), and ~~the all~~ organic compounds listed in the most recent version of EPA's AP-42 Table 2.4-1, excluding acetone. All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division within ~~45~~ 60 days of the test date. After conducting three annual landfill gas characterization tests, the Permit Holder may request to remove specific compounds from the list of compounds to be tested for if the compounds have not been detected, have no significant impact on the cancer risk determination for the site, and have no significant impact on the hazard index determination for the site. If the Permit Holder has excluded any NPOCs from the POC emission calculations for the site, then the Permit Holder shall continue to test for these NPOCs on an annual basis. (basis: Toxic Risk Management Policy)

Table VIII "Test Methods" was modified in a similar matter to clarify that only organic compounds (excluding acetone) from the AP-42 list are to be included in the annual test.

Comment #8: Sonoma requests that the wind speed monitoring/recording requirements in Permit Condition #4044, Part 17.p be deleted from the permit.

- Discussion:
Permit Condition #4044, Part 17.p requires that the wind speed at the Central Landfill be monitored on a daily basis and that a record be made for any date when the wind speed exceeds 15 mph. Sonoma objects to this condition because there is apparently no basis for the condition and no special action is required by the landfill on days when the wind speed exceeds 15 mph.

- District's Position:
The District agrees with Sonoma that this condition has no basis or particular usefulness and should be removed.
- Changes to the Permit as a Result of Comment #8:
Part 17.p of Permit Condition #4044 has been removed from the Title V permit. In addition, the Monitoring Requirement Citations for "Opacity" in Table VII-A have been updated accordingly.

Comment #9: The version of Regulation 8-34-501.3 listed as SIP 8-34-501.3 in Table VII-A is no longer current and should be removed.

- Discussion:
In Table VII-A under "Temperature of Combustion Zone" the proposed Significant Revision of the Title V permit includes SIP 8-34-501.3 as a Monitoring Requirement Citation. Since the current version of the regulation has been approved into the SIP, this reference is no longer necessary and should be removed from the permit.
- District's Position:
The District is in agreement that this citation should be removed from the permit.
- Changes to the Permit as a Result of Comment #9:
The reference to SIP 8-34-501.3 was removed from Table VII-A.

Comment #10: The Monitoring Requirement Citation for "Opacity" for the Flare A-2 in Table VII-A incorrectly refers to Regulations 8-34-501.3 and 8-34-507 and Permit Condition #4044, Parts 13 and 17.

- Discussion:
The regulations and permit conditions cited as the Opacity monitoring requirements for the A-2 Flare in Table VII-A are not correct and should be deleted.
- District's Position:
The District is in agreement with Sonoma that the monitoring citations were incorrect. There should in fact be no monitoring citation for opacity from the flare because visible emissions are not expected from the combustion of landfill gas in an enclosed flare.
- Changes to the Permit as a Result of Comment #10:
Regulations 8-34-501.3 and 8-34-507 and Permit Condition #4044, Parts 13 and 17 were removed as Opacity monitoring requirements for the Flare A-2 in Table VII-A.

Sonoma County Central Landfill
Response to Comments
Page 7

Enclosed is a copy of the final permit. If you have any questions regarding this permit, please call Ted Hull, Air Quality Engineer, at (415) 749-4919.

Sincerely yours,

Jack P. Broadbent
Executive Officer / APCO

RTH:rth
Enclosure

cc: Deborah Jordan, USEPA
Peter Venturini, CARB